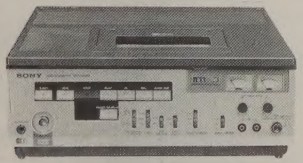
SONY®

VIDEOCASSETE RECORDER Betamax®

SLO-323

This machine can be used with any videocassette tapes having the mark B.



PROPERTY OF DEPT. C-270
METROLOGY LAB.
DO NOT REMOVE
FROM AREA

OPERATING INSTRUCTIONS

Before operating the set, please read this manual thoroughly. This manual should be retained for future reference.

The operating instructions found herein are supplemented by a set of separately-bound ready-reference guide. Detailed instructions found in this booklet offer complete directions for connection, as well as detailed descriptions for the use of all viewer controls.

OWNER'S RECORD

The model and serial numbers are located at the rear. Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model. No. SLO-323 Serial No. _____

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WARNING

To prevent fire or shock hazard, do not expose the set to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

NOTE: This machine conforms to the Beta **B** I type recording and playback format.

FEATURES

Automatic control of video recording level
The Automatic Gain Control circuits maintain the proper video recording level, assuring optimum video recording.

Manual control of audio recording level/Audio limiter system
By setting the AUDIO LIMITER switch to OFF, the audio recording level may be controlled manually using a level meters to indicate the signal level. When the AUDIO LIMITER switch is set to ON, high-level peaks are automatically limited to prevent tape saturation and distortion without audibly altering the dynamic range of the recording.

Betascan operation
A high-speed forward or reverse picture can be monitored and used to locate a particular portion rapidly.

Variable playback speed
The playback speed may be changed from frame-by-frame tape advance to slow-motion, to up to two times normal speed.

Dual audio tracks
Two audio tracks permit recording and playback of stereo sound or bilingual program material.

Audio dubbing
Audio (commentary, music, etc.) may be added to recordings made earlier.

Editing capability
- The direct capstan and direct drum servo system using a brushless motor is used in this recorder to control the tape speed and assure precise editing and stable pictures with minimum jitter.
- A drop-out compensator and a noise eliminator assure faithful reproduction of the recorded picture.
- For quick and precise editing, an automatic editing control unit is available as an optional accessory.

Auto search control
Automatic remotely controlled playback of desired portions of a recorded tape is possible using an auto search control unit (optional).

Remote control
Operation from a remote location is possible with the use of a remote control unit (optional).

Logic control
The operating mode can be changed without pressing the STOP button between modes. Controls are positive action and feather light to the touch.

Automatic transport operation
The PROGRAMMED OPERATION selector permits automatic repeat- or rewind-operation.

Playback on a conventional TV receiver
The picture and sound of a recorded videocassette may be played back on a regular TV receiver.

Timer recording and playback
With the aid of a timer (optional), TV recordings can be made while the recorder is unattended. Playback can also be done with a timer.

Pause operation
The tape can be momentarily stopped in the record, audio dub or playback mode. A still picture is displayed while in the pause mode.

Full auto rewind
At the end of the tape, the transport stops and automatically fully rewinds.

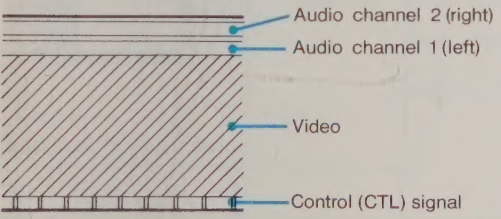
Moisture eliminator
Moisture condensed inside the machine is detected and automatically evaporated by means of an internal fan and heater, preventing possible tape damage.

GENERAL NOTES

- This machine is designed for operation in a horizontal position and only from 120V ac, 50/60 Hz.
- Do not install the set in a location near heat sources, such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Allow adequate air circulation to prevent internal heat build up. Do not place the set on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- Keep the set and the videocassette away from strong magnetic fields.
- After playing a tape, remove the cassette from the compartment if the set will not be used for any length of time. Do not transport the set with a videocassette in place.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- Head-cleaning is not a routine maintenance procedure and should not be performed by the user. Should snow or streaks appear in the playback picture (see page 13), consult your dealer or Sony service station.
- Should any liquid or solid object fall into the cabinet, unplug the set and have it checked by qualified personnel before operating it any further.
- Save the original shipping carton and packing material; they will come in handy if you ever have to ship your set. For maximum protection, repack the set as it was originally packed at the factory.
- Clean the cabinet, panel and controls with a dry soft cloth, or a soft cloth lightly moistened with mild detergent solution. Do not use any type of solvent such as alcohol or benzine which may damage the finish.

TAPE PATTERN

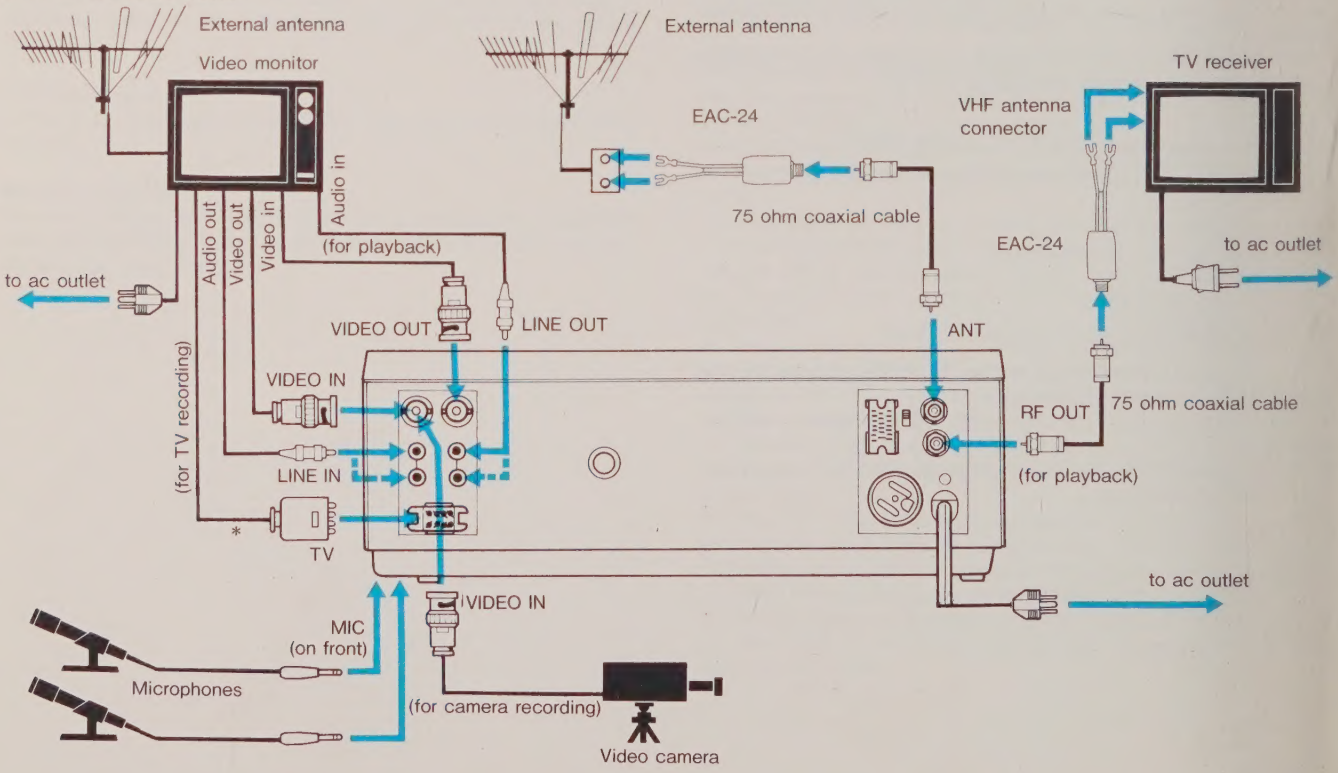
Since the full width of the tape (as shown below) is used for recording video and audio, the tape cannot be used in the reverse direction.
When recording in stereo, the source on the left side is recorded on channel 1 and the right on channel 2.



- To record a TV program using the TV (8-pin) connector, the sound will be recorded on channel 1.
- When dubbing audio, the new audio will be recorded only on channel 2.
- It is recommended that channel 1 is used when only one channel is used for recording.

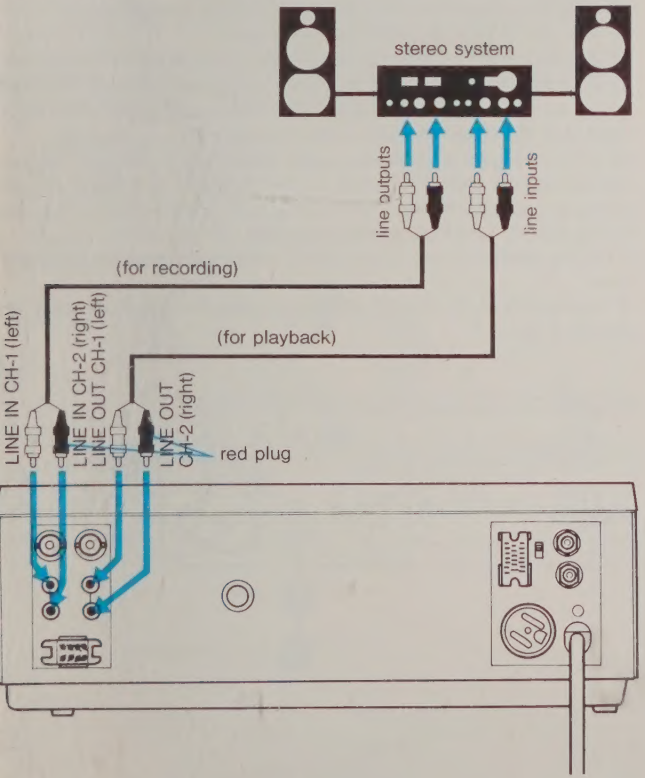
CONNECTIONS

SYSTEM CONNECTIONS



6 *For monitors equipped with a matching 8-pin connector, the single cable between the monitor and recorder provides all audio and video input and output connections.

CONNECTION WITH STEREO SYSTEM



Notes

- The camera must conform to American (EIA) TV standards and have an internal sync source that provides 2:1 interlace signals.
- For monaural recording, use of the LINE IN CH-1 jack is recommended. Another audio program on channel 2 can be recorded afterwards using the audio dubbing procedure.
- When recording with the 8-pin connector, the sound will be recorded on channel 1.
- To prevent hum in the audio, connect the ground terminal [⏚] to an earth ground.
- If the MIC and LINE IN jacks are connected simultaneously, the MIC jacks have priority; audio from the LINE IN jacks will not be recorded.
- The AC power cord should be connected to the working AC outlet to see the TV program on the TV receiver connected to the SL-323, or the picture will be unstable.

CAUTION

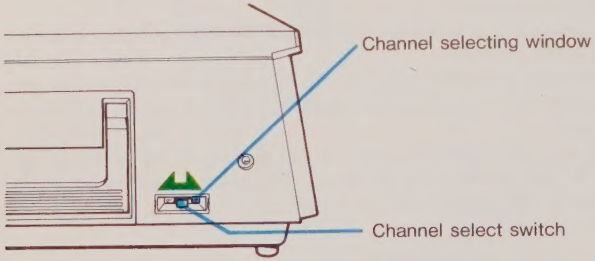
Connection between the SLO-323 VHF OUT connector and antenna terminals of a TV receiver should be made only as shown in these instructions. Failure to do so may result in operation that violates the regulations of the Federal Communications Commission regarding the use and operation of rf devices.

Never connect the output of the SLO-323 to an antenna or make simultaneous (parallel) antenna and SLO-323 connections at the antenna terminals of the receiver.

OPERATION

RF UNIT

The RF unit, installed into the compartment on the bottom, is preset to channel 3 or 4 whichever is not active in the area of anticipated sale. If the set is moved to an area where the preset channel is in use, it will be necessary to reset the channel select switch on the RF unit to the other channel.



AUDIO RECORDING LEVEL ADJUSTMENT

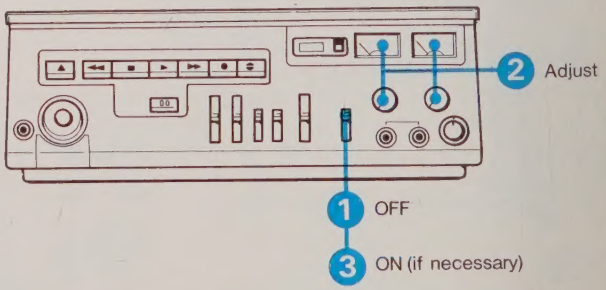
To adjust the audio recording level, proceed as follows:

❶ Set the AUDIO LIMITER switch to OFF.

❷ Adjust the appropriate AUDIO LEVEL controls (CH-1 and/or CH-2), so that the meter pointers swing up to, but not into, the red zones at their maximum deflection. If only one audio channel is used, set the other channel control to its minimum position.

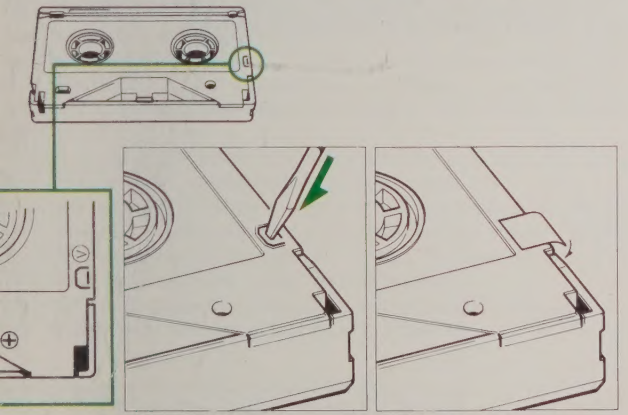
❸ If it is desired to minimize audio distortion on program peaks, set the AUDIO LIMITER switch to ON after the audiolevel adjustments is completed. When recording with a microphone, the use of the AUDIO LIMITER is recommended.

- During playback, the AUDIO LEVEL meters indicate the playback level.
- The setting of the AUDIO LEVEL controls has no effect upon the playback level.



VIDEOCASSETTE SAFETY TAB

To protect a recording from accidental erasure, break off the tab on the bottom of the videocassette using a screwdriver or similar device. With the tab removed, the record mode does not function. If you wish to record on a cassette with the tab removed, simply cover the hole with a piece of cellophane or vinyl tape.



PAUSE

To stop the tape momentarily during record, playback or audio dub mode, press the PAUSE button. To restart the tape, press the PAUSE button again.

When the PAUSE button is pressed while recording, an E-to-E (electronics-to-electronics) mode picture will be observed on the TV screen, but not recorded.

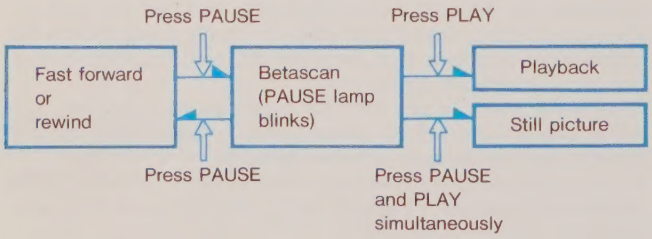
When the PAUSE button is pressed during playback, a still picture will be displayed without a noise band. The still picture may be unstable on some monitors. In this case, turn the V LOCK ADJUST control on the rear until a stable picture is obtained. To start recording or dubbing audio from playback mode, press the PAUSE button during playback, then press the REC or AUDIO DUB button, and press the PAUSE button again.

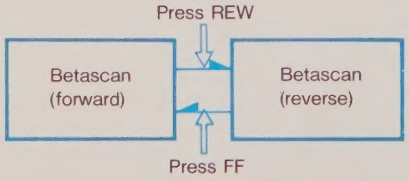
The PAUSE button is also used for the Betascan operation.

- The pause mode will be automatically released after about 7 minutes, and the recorder will then revert to the stop mode.
- A recording made with the use of the PAUSE button may exhibit momentary instability in playback at the point the pause mode was initiated.

BETASCAN OPERATION

A high-speed forward or reverse picture can be seen on the monitor screen to locate the desired portion rapidly. During the fast forward or rewind mode, pressing the PAUSE button causes the recorder to enter the Betascan mode. By pressing the PAUSE button and the FF or REW button simultaneously, the recorder will also enter the Betascan mode. During the Betascan operation, the PAUSE lamp blinks. From the Betascan mode, playback, still picture, etc., may be directly obtained as follows.





- In Betascan operation, slanting stripes or bars may appear, or the picture may roll at the beginning or end portion of the tape (on some monitors), even though Betascan is functioning correctly. If such a symptom appears at the middle part of a tape, adjust the horizontal and vertical hold controls on the monitor. If such a condition still exists, consult your Sony Service Center.
- Streaks or double images may appear in the Betascan picture, even though Betascan is functioning correctly.

CONTROL OF PLAYBACK SPEED

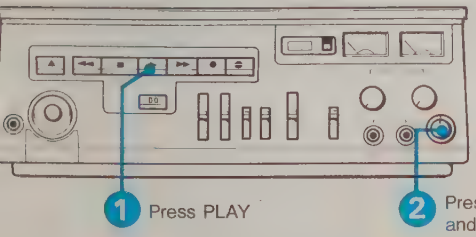
The playback speed may be changed by using the VAR SPEED control, from frame-by-frame advance through two times normal speed including slow motion. The PLAY lamp blinks.

Press the PLAY button then press the VAR SPEED control; the playback speed will be controlled by turning the VAR SPEED control. Turn the control clockwise for high-speed picture: Using a fully clockwise rotation, two times normal speed will be obtained.

Turn the control counterclockwise for slower speed; using fully counterclockwise rotation, frame-by-frame tape transportation will be obtained (the picture changes frame-by-frame every 2 seconds).

To return to normal speed operation, press the VAR SPEED control again.

- When the recorder enters a mode other than playback, the VAR SPEED control will be automatically deactivated.
- If noise appears in the two times normal speed picture, adjust the TRACKING control until the noise goes off the screen. When the playback speed is returned to normal, be sure to turn the TRACKING control to the center detent position.
- In a slow-motion picture, streaks or double images may appear, even though the machine is functioning correctly.

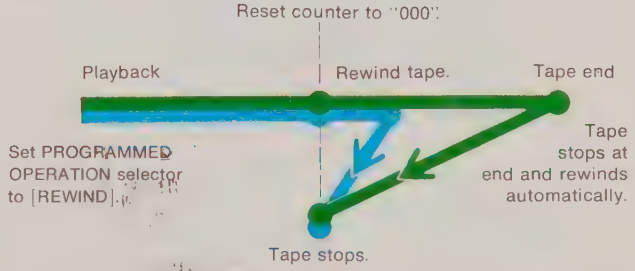


TAPE COUNTER AND PROGRAMMED OPERATION

Normal operation: The PROGRAMMED OPERATION selector should normally be set to OFF. Before playing a tape, set the tape counter to "000" by pressing the reset button. The counter number will advance with forward tape motion. Reference program material to counter readings to locate particular segments in playback.

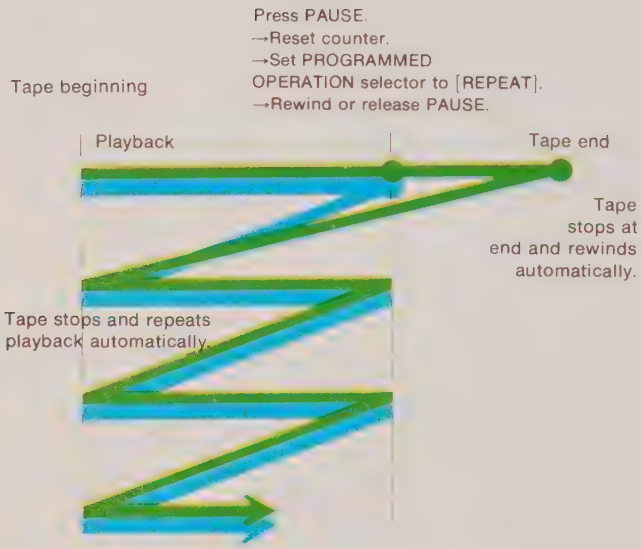
Programmed operation: When the counter is reset with the PROGRAMMED OPERATION selector in the [REWIND ⏪] position, the tape will rewind to "000" when the REW [◀◀] button is pressed. This allows automatic, precise program relocation of the recorded tape.

REWIND operation



For repeat playback of a particular segment, reset the counter first, then set the PROGRAMMED OPERATION selector to the [REPEAT ⏪] position. Press the REW button, and the tape will rewind to the very beginning. Thus, the tape will repeat play between the beginning and the "000" counter reading.

REPEAT operation



• In timer playback, the PROGRAMMED OPERATION selector functions the same.

AUTO OFF INDICATOR

If the machine is moved directly from a cold to a warm location, moisture may condense on internal parts. To prevent possible damage under this condition, the AUTO OFF lamp will light indicating that excessive moisture has been detected within the set, and the recorder will eject the cassette. If the AUTO OFF indication appears, keep the set power ON and wait until the moisture is evaporated by the built-in fan and heater; the lamp will go out. If the lamp remains on for several hours, consult the dealer from whom the set was purchased, or a local Sony authorized service station.

FULL AUTO REWIND

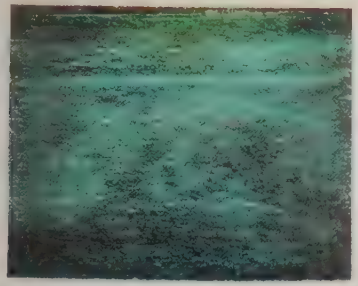
When the tape reaches its end, it will stop automatically and the REC, PLAY or FF lamp will go out. In a few seconds, the REW lamp will light and the tape will automatically rewind to the beginning and then stop.

ERASING

The erase head is energized in the record mode. Whenever a new recording is made, the previous recording on the tape is erased. Should you desire to erase a section of tape without recording, disconnect all signal sources and run the tape in the record mode.

VIDEO-HEAD CLEANING

The appearance of snow or streaks in the playback picture may indicate the need for cleaning the video heads inside the recorder. Should the need for head cleaning be suspected, consult the dealer from whom the set was purchased, or a local Sony authorized service station.

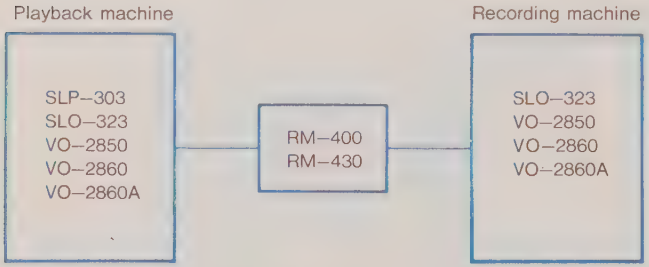


TRACKING ADJUSTMENT

In the unlikely event that streaks or snow appear in the playback of tapes made on other recorders or in two times normal speed, turn the TRACKING control in either direction until the best picture is obtained. Allow a second or two for new settings to take effect. When playback of this particular tape is finished, return the TRACKING control to its center detent position.

AUTOMATIC EDITING CONTROL

The Sony Automatic Editing Control RM-400 or RM-430 in which digital tape time counters assure automatic and accurate tape-to-tape editing, are available as options.



To use Automatic Editing Controls:

- Set the PROGRAMMED OPERATION and TIMER switches to OFF.
- Set the REMOTE control switch to 400.
- Set the REVERSE ON/OFF switch(es) on the RM-430 to OFF (except when used with the VO-2860 or VO-2860A).
- The tape speed of search and slow operation with the RM-400 or RM-430 is determined by the setting of the VAR SPEED control on this machine.
- For details on tape editing, refer to the instruction manuals furnished with the RM-400 or RM-430.

AUTO SEARCH CONTROL

The Sony Auto Search Control RX-353, RX-303 or RM-300 (optional) makes possible automatic remote controlled playback of desired portions of a recorded tape.

- All settings on the recorder have priority over the auto search control.
- Set the PROGRAMMED OPERATION and TIMER switches to OFF.
- Set the REMOTE control switch to 300.
- For detailed operation, refer to the instruction manual furnished with the Auto Search Control.

Operation with the RX-353

The program recorded on the tape is divided into segments by deciding the beginning and end addresses using the RX-353. and each segment has its own number. With this system, the multiple segments can be searched and played back in desired order. The data of the segments can be recorded on the audio channel 1 track of the tape, and can be read with the RX-353.

For data recording, connect the mini plug to the audio LINE IN CH-1 jack, and adjust the recording level as follows.

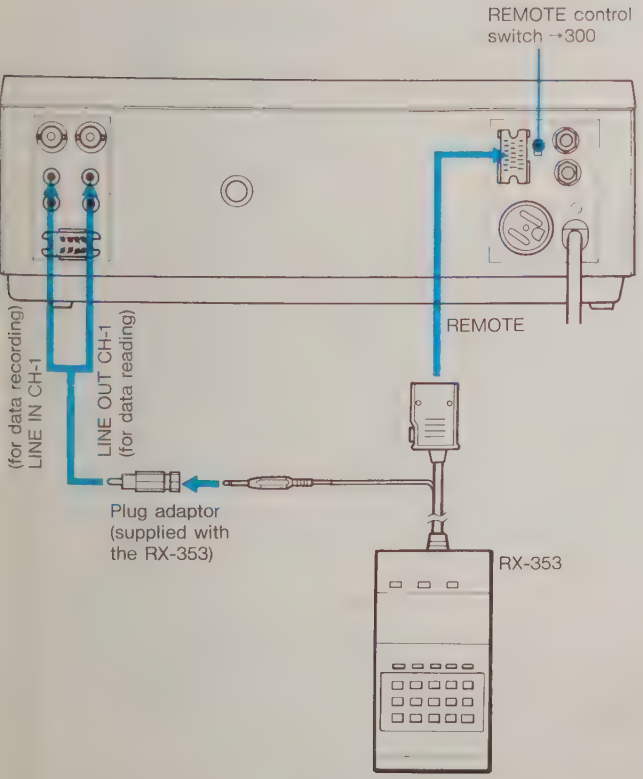
❶ Set the AUDIO LIMITER switch to ON.

❷ Turn the CH-1 AUDIO LEVEL control fully clockwise.

When dublicating the tape, adjust the recording level with the same manner as the usual audio recording.

To read the data, connect the mini plug to the audio LINE OUT CH-1 jack.

- The CTL signal should be recorded from the beginning of the tape to record the segment data. Be sure to record a video signal from the beginning of the tape for about 20 seconds so that the CTL signal will be recorded with the video signal.

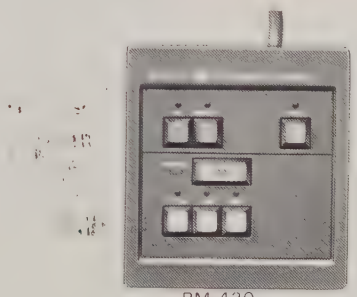


REMOTE CONTROL

The Sony Remote Control RM-420 (optional) may be used to operate the SLO-323 from a remote location of up to about 30 meters (100 feet). The function buttons of the RM-420 correspond to those on the SLO-323. Since logic control is employed in the RM-420, operating modes can be selected without the requirement of pressing the STOP button between modes.

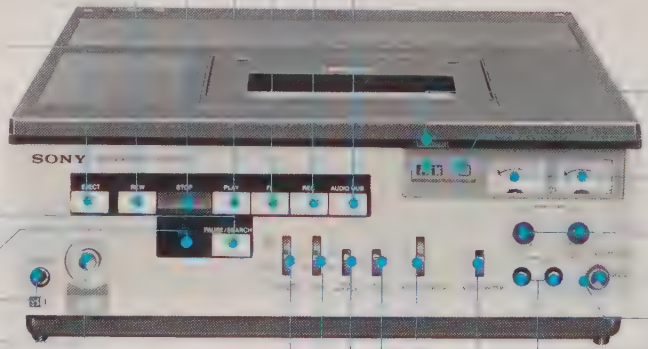
The Remote Control RM-410 is also available as an optional accessory. The CUT IN, CUT OUT and EDIT buttons do not function when used with this recorder. Logic control is not employed in the RM-410, thus it is necessary to press the STOP button between modes.

- To use the SLO-323 with this Remote Control unit, set the REMOTE control switch to 400.



RM-420

LOCATION AND FUNCTION OF PARTS AND CONTROLS



AUDIO DUB (dubbing) button
REC (record) button
FF (fast forward) button
PLAY button
STOP button
REW (rewind) button
EJECT button
PAUSE/SEARCH button
AUTO OFF lamp
HEADPHONES jack
POWER button
PROGRAMMED OPERATION selector
TIMER switch
VHF OUTPUT selector
INPUT SELECT switch
Pilot lamp
Tape counter/reset button
AUDIO LEVEL meters
AUDIO LEVEL controls
VAR SPEED control
TRACKING control
MIC jacks
AUDIO LIMITER switch
AUDIO MONITOR switch

POWER button
Press this button to turn the power on. To turn power off, press the button again.
HEADPHONES jack
An 8-ohm impedance stereo headphones is used here.
EJECT button
Press this button to raise the cassette compartment for insertion or removal of the videocassette.
REW (rewind) button
Press this button to rewind the tape.
STOP button
Press this button to stop the tape.
PLAY button
Press this button to play back the tape.
While pressing the REC button, press this button to enter the record mode.
FF (fast forward) button
Press this button to advance the tape rapidly.
REC (record) button
While pressing this button, press the PLAY button to enter the record mode.
AUDIO DUB (dubbing) button
Press this button to record new audio on a tape on which the video program has been previously recorded. In this mode, audio will be recorded on channel 2.
AUTO OFF lamp
This lamp lights to indicate that excessive moisture has been detected in the machine.
PAUSE/SEARCH button
Press this button to momentarily stop the tape, or for Betascan operation.

PROGRAMMED OPERATION selector
This selector functions in the playback mode as follows.
REPEAT: Repeat the playback between the beginning of the tape and the tape counter "000" position.
OFF: Normally set to this position. Playback is performed to the tape end, at which time the tape is automatically rewound to the beginning and stops.
REWIND: Stop the tape at the tape counter "000" position, in the rewind mode.
TIMER switch
This switch controls the timer operation as follows.
REC: Recording with the timer is performed. At this position, the EJECT and REW buttons do not function.
PLAY: Playback with the timer is performed.
OFF: The timer is not used.
VHF OUTPUT selector
This selector controls which signal (TV antenna or VTR output) is sent to the VHF OUT connector of the machine, when a standard TV receiver is used as the monitor. The selector is set as follows.
VTR: To play the VTR through the TV.
ANT: To use the TV set normally.
• When the power is turned off, the setting is automatically changed to the ANT, and the signal from the TV antenna is supplied. When the power is turned on again, the signal described as above will be supplied.
INPUT SELECT switch
This switch selects which video input will be used for recording.
LINE: The program connected to the VIDEO IN and audio LINE IN jacks is recorded.
TV: The program connected to the TV connector is recorded.
(A video monitor or TV tuner accessory is required to record off-air TV programs.)

AUDIO MONITOR switch

When monitoring the sound through a video monitor connected with the TV connector or headphones, this switch controls which audio program will be heard, as follows:

CH-1: The sound recorded on channel 1 is supplied to the TV connector and HEADPHONES jack.

MIX: The mixed sound (in monaural) on channels 1 and 2 is supplied to the TV connector. To the HEADPHONES jack the sound on channel 1 is to the left, and channel 2 to the right.

CH-2: The sound on channel 2 is supplied to the TV connector and HEADPHONES jack.

• This switch does not affect the sound to the audio LINE OUT jacks; in any position, the sound on channel 1 is supplied to the LINE OUT CH-1 jack and the sound on channel 2 appears at the LINE OUT CH-2 jack.

AUDIO LIMITER switch

This switch controls the action of the AUDIO LIMITER circuitry.

ON: To minimize audio distortion on program peaks, especially in microphone recording, set this switch to ON after the audio recording level adjustment is completed.

OFF: For manual recording, or for adjusting the audio recording level.

MIC jacks

These jacks accept 600-ohm impedance microphones. The microphone connected to the CH-1 jack is recorded on channel 1, and the source on the CH-2 jack is recorded on channel 2.

TRACKING control

This control is used in playback to correct tracking deviation between machines, or to compensate for streaks appearing in the two times normal speed picture.

VAR SPEED control

This control adjusts the playback speed from frame-by-frame speed to two times normal speed, including the slow-motion picture. To implement VAR SPEED control, press this control during playback; turn clockwise for a higher-speed picture, or counter-clockwise for a slower-speed picture.

Pilot lamp

This lamp lights when the recorder is turned on.

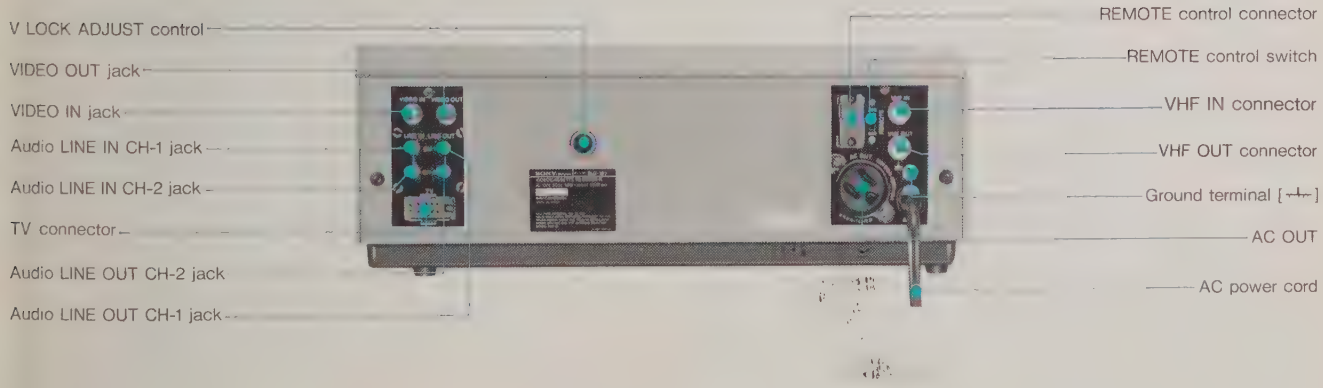
Tape counter/reset button

Before recording is started, set the tape counter to "000" by pressing the reset button. The counter number will advance with forward tape motion. Program material can be referenced to counter readings in order to locate particular segments in the tape playback.

AUDIO LEVEL controls/meters

While watching the meters, turn these controls to adjust the audio recording level. The CH-1 control adjusts the sound for channel 1 and the CH-2 control adjusts the sound for channel 2.

During playback, the meters indicate the playback level. These controls do not affect the playback level.


V LOCK ADJUST control
VIDEO OUT jack
VIDEO IN jack
Audio LINE IN CH-1 jack
Audio LINE IN CH-2 jack
TV connector
Audio LINE OUT CH-2 jack
Audio LINE OUT CH-1 jack
REMOTE control connector
REMOTE control switch
VHF IN connector
VHF OUT connector
Ground terminal [⏚]
AC OUT
AC power cord

VIDEO IN jack (BNC type)
Connect the video output jack on a video monitor or a videocassette recorder, or a camera for recording.

Audio LINE IN CH-1 jack (Phono type)
Connect the left output jack of an audio system, or the audio output jack on a video monitor or a videocassette recorder for recording.

Audio LINE IN CH-2 jack (Phono type)
Connect the right output jack of an audio system, or the audio output jack on a video monitor or a videocassette recorder for recording.

TV-connector (8-pin)
Connect the 8-pin connector on a color video monitor. The video and audio input and output connections can be made with a single cable.

VIDEO OUT jack (BNC type)
Connect the video input jack of a video monitor or a videocassette recorder. This jack supplies the playback video signal.

Audio LINE OUT CH-1 jack (Phono type)
Connect to the left input jack of an audio system, or the audio input jack on a video monitor or a videocassette recorder. This jack supplies the sound on channel 1.

Audio LINE OUT CH-2 jack (Phono type)
Connect to the right input jack of an audio system, or the audio input jack on a video monitor or a videocassette recorder. This jack supplies the sound on channel 2.

V LOCK ADJUST control
If the picture on the monitor is unstable during still or two times normal speed pictures, remove the plastic cover and turn the screw with a screw driver until the jitter is minimized.

REMOTE control connector (20-pin)
Connect the 20-pin connector of the remote control unit, editing control unit, or auto search control unit, etc.

REMOTE control switch
300: When the RM-300, RX-353 or RX-303 is connected to the REMOTE control connector, set this switch to the 300 position.
400: When the RM-400, RM-410, RM-420 or RM-430 is connected to the REMOTE control connector, set the switch to the 400 position.

AC OUT
This outlet supplies ac power to other video equipment.

VHF IN connector (F type)
Connect the TV antenna.

VHF OUT connector (F type)
Connect to the VHF antenna terminal of the TV receiver to see the playback picture on the conventional TV receiver, or to supply the TV signal received by the TV antenna.

Ground terminal [⏚]
To reduce hum in audio, connect this terminal to an earth ground with a ground wire.

TECHNICAL SPECIFICATIONS

General

Vide recording system	Rotary two-head helical scanning
Video signal	EIA standards, NTSC color
Storage temperature	−20°C to +60°C (−4°F to 140°F)
Operating temperature	5°C to 40°C (41°F to 104°F)
RF output signal	Channel 3 or 4, depending upon the selected operating channel of the RF unit, 75 ohms, unbalanced F-type connector
Power requirements	120 V ac ± 10%, 50/60 Hz
Power consumption	60 W
Weight	12.3 kg (27 lb 2 oz)
Dimensions	392 × 148 × 353 mm (w/h/d) (15½ × 5⅞ × 13⅞ inches)
AC outlet	400 W max. (unswitched)

Video

Input	1.0 V (p-p) $^{+1.0}_{-0.5}$ V (p-p), 75 ohms unbalanced, sync negative BNC connector
Output	1.0 V (p-p) ± 0.2 V (p-p), 75 ohms unbalanced, sync negative BNC connector
Horizontal resolution	Monochrome: 300 lines Color: 240 lines
Signal-to-noise ratio	45 dB

Audio

Input	LINE IN: more than 100 k ohms, −10 dB Phono jack MIC: −60 dB, suitable for microphone with 600-ohm impedance Mini jack
Output	LINE OUT: less than 2 k ohms, −5dB (47 k ohm load), unbalanced Phono jack HEADPHONES: 8 ohms, −27 dB Phone jack
Frequency response	50 to 10,000 Hz
Signal-to-noise ratio	45 dB (at 333 Hz, 3% distortion)
Usable cassettes	Tapes with the mark Ⓑ
Operating position	Horizontal

Tape transport

Tape speed	4.0 cm/sec.
Recording or playback time	60 min. (with Sony L-500 cassette)
Fast forward time	Within 3 min. 30 sec. (L-500)
Rewind time	Within 3 min. 30 sec. (L-500)

Accessories supplied

External antenna connector EAC-24 (75-ohm to 300-ohm matching transformer)
75-ohm coaxial cable (1.5 m)
Dust cover

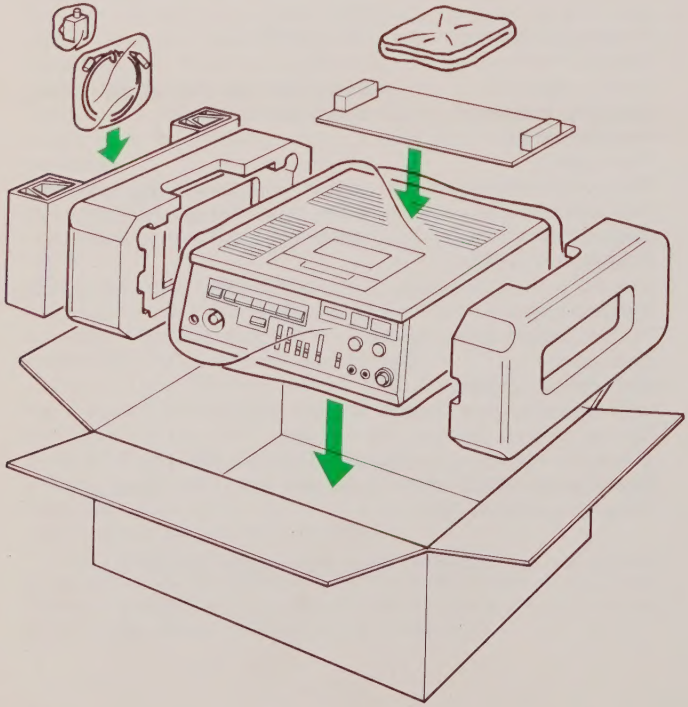
Optional accessories

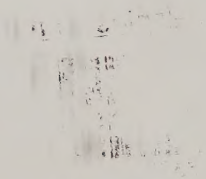
Auto search control RM-300, RX-353, RX-303
Remote controls RM-420 and RM-410
Automatic editing control units RM-400 and RM-430
Digital timers DT-32 (for the USA) and DT-30 (for Canada)
Timer tuner unit TT-300

Design and specifications subject to change without notice.

REPACKING FOR SHIPMENT

The repacking procedure is subject to change.
Refer to the illustration on the original carton for latest packing instructions.





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